

Title (en)

DEVICE FOR PICKING UP AND HOLDING ARTICLES, SUCH AS CONTAINERS, FROM OR AT A CONVEYOR EQUIPPED WITH THIS DEVICE

Publication

EP 0273798 A3 19880720 (FR)

Application

EP 87402692 A 19871127

Priority

FR 8616752 A 19861201

Abstract (en)

[origin: US4823934A] The present invention concerns a device for gripping and holding back containers having two casings solid respectively with two chains, each of these casings including two racks engaging with a pinion which actuates in a synchronized manner both racks, each of which is coupled to one end of two transversal plates with respect to the chains, which plates can be simultaneously spaced apart and brought together to adapt to containers of any shape and dimension.

IPC 1-7

B65G 17/32

IPC 8 full level

B65G 17/32 (2006.01)

CPC (source: EP US)

B65G 17/323 (2013.01 - EP US); **B65G 2201/02** (2013.01 - EP US); **B65G 2201/0244** (2013.01 - EP US)

Citation (search report)

- [A] US 2249659 A 19410715 - KERNS FRED R, et al
- [A] FR 1070445 A 19540726
- [A] DE 2134985 A1 19730125 - HEINRICH FRINGS KG
- [A] PATENT ABSTRACTS OF JAPAN, vol. 7, no. 110 (M-214)[1255], 13 mai 1983; & JP-A-58 31 811 (HITACHI SEISAKUSHO K.K.) 24-02-1983

Cited by

EP2113463A1; EP0309444A3; DE4103479A1; US5216955A; US8079460B2

Designated contracting state (EPC)

AT BE CH DE ES GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0273798 A2 19880706; EP 0273798 A3 19880720; EP 0273798 B1 19901024; AT E57670 T1 19901115; DE 273798 T1 19881215; DE 3765761 D1 19901129; ES 2004838 A4 19890216; ES 2004838 B3 19910501; FR 2607479 A1 19880603; FR 2607479 B1 19910215; GR 3001148 T3 19920625; GR 890300007 T1 19890929; US 4823934 A 19890425

DOCDB simple family (application)

EP 87402692 A 19871127; AT 87402692 T 19871127; DE 3765761 T 19871127; DE 87402692 T 19871127; ES 87402692 T 19871127; FR 8616752 A 19861201; GR 890300007 T 19890929; GR 900401015 T 19901130; US 12657987 A 19871130